

MODIS Science Data Support Team (SDST) Meeting Minutes 10/04/91

ATTENDEES:	Phil Ardanuy	RDC	982-3714
	Lloyd Carpenter	RDC	982-3708
	Al Fleig	900	286-7747
	Harold Geller	RDC	982-3740
	Tom Goff	RDC	982-3704
	Liam Gumley	RDC	982-3748
	Ravi Kumar	STX	513-1630
	Ed Masuoka	920	286-7608
	Jim Ormsby	974	286-6811

NEXT MEETING:	Date	Time	Building	Room
	Friday, October 11	10:00 am	16	242

TOPICS:

1. MODIS SCIENCE TEAM MEETING: The presentations by the SDST on the TLCF, image registration, and the MODIS Level-1 processing overview were well received by the MODIS Science Team. Copies of the presentation materials were included in the handout for the SDST meeting held on 10/04/91.

2. MODIS IMAGE REGISTRATION: The question of MODIS Image Registration (determining the earth locations to be associated with radiance data) received considerable attention at the science team meeting and at the following SDST meeting. The science requirement for image registration accuracy exceeds that which can be obtained directly from the specified spacecraft position and attitude knowledge and instrument pointing knowledge. The improvement to be expected from using ground control points (or similar methods) will be limited by the character of the variations in attitude and pointing errors. Systematic and slowly varying errors can be modelled, whereas high frequency jitter which changes from pixel to pixel and scan line to scan line is not easily removed.

It may also be necessary to determine the misregistration between spectral bands, and to associate pixels with the along-track detectors. The SDST must be careful to ask the right questions of the project in order to assure that it will be possible to meet the science requirements for image registration. The costs of image registration must also be

determined.

The MODIS Science Team is assuming that a terrain model will be provided and available at-launch. The design of the image registration algorithm must be consistent with this assumption.

3. MIAMI VISIT: Al Fleig, Phil Ardanuy, and Tom Goff visited Bob Evans at the oceans data calibration, processing and analysis facility at the University of Miami. Bob Evans was very helpful in providing information about their operation. The MODIS Oceans Team may want to have a product with degraded resolution where 1 km data are not needed (for areas far removed from coastlines).

ACTION ITEMS:

05/03/91: Prepare a Level-1 processing assumptions, questions and issues list, to be distributed to the Science Team Members and the MCST for comment. STATUS: Closed. Due date 06/07/91.

06/07/91: Speak to Alan Strahler, when he returns, regarding his MAS requirements. STATUS: Closed. Due date 07/05/91

06/28/91: Prepare a detailed list of scheduler assumptions in relation to Level-1 MODIS processing scenarios. STATUS: Closed. Due date 07/26/91.

08/30/91 [Lloyd Carpenter and Team]: Draft a schedule of work for the next 12 months. Include primary events and milestones, documents to be produced, software development, MAS support, etc. STATUS: Open. Due date 09/27/91.

08/30/91: Contact Sol Broder regarding the MODIS interface with the scheduler. STATUS: Closed. Due date 09/13/91.

10/04/91 [Phil Ardanuy and Team]: Prepare questions for the project to characterize the spacecraft position and attitude knowledge and the MODIS pointing knowledge in a way that will facilitate the evaluation of methods such as image registration to meet the science team requirements for earth location. STATUS: Open. Due date 10/18/91.

10/04/91 [Tom Goff]: Examine and describe the Miami DSP navigation scheme in relation to MODIS navigation. Status: Open. Due date 11/15/91.

10/04/91 [Tom Goff]: Contact Angel Lee (currently at GSFC) to ask questions regarding the DSP. Status: Open. Due date 10/18/91.